



# South African Radio League Amateur Radio Hall of Fame

**Mike Bosch ZS2FM**  
Inducted in 2016

Mike Bosch was born in 1926 and licenced as ZS2FM in 1948.

Mike read about the reception of BBC TV in Cape Town by Henry Rieder ZS1P (†) in 1949. Mike built a TV receiver around a VCR-97 war surplus radar cathode ray tube and managed to pick up the TV sound on 41,5 MHz from Alexandra Palace, London. As the solar cycle declined, the receiver was stripped to build an oscilloscope, but fortunately the VHF converter remained intact. In 1956, the MUF rose above 45 MHz again and the oscilloscope was turned back into a TV receiver with the addition of a sawtooth oscillator and a video IF stage connected to the VHF converter. A few weeks later, he picked up his first TV picture from the BBC on this homebrew TV receiver. That event was the spark that started a lifelong love affair with VHF and above, especially the 50 MHz band. He wrote his first article for *RadioZS*, entitled "See TV on your oscilloscope", in 1959. He is a prolific author, sharing his experiences and passion with a wide audience.

In 1962, while resident in East London, Mike and Arthur "Windy" Gale ZS2CK constructed two microwave transceivers around 723A/B klystrons and cinema arc-lamp mirrors as parabolic reflectors. They established the first amateur microwave record in South Africa on 10 GHz (3 cm) over a distance of 500 m on 29 November 1962. When they had extended the range to 2 km, they announced it in *RadioZS*. During this time he also started his first experiments on 50 and 144 MHz, and also developed an interest in radio astronomy.

Mike made many DX contacts on 50 MHz using F<sub>2</sub>, Sporadic-E and Meteor Scatter and set many distance records in the process while making an in depth study of VHF propagation. He also conducted a series of Meteor Burst experiments with Dave Larsen ZS6DN (†).

Over the years, Mike wrote many articles and columns for *RadioZS* to motivate radio amateurs, especially the younger generation, to become active on VHF and UHF.

For at least three decades, Mike has maintained the South African distance records table for VHF and above. These records continue to provide a strong incentive for technological innovation and excellence.

He also founded the PEARS National VHF/UHF Contest at the turn of the century.



The South African Amateur Radio Development Trust named Mike the Radio Amateur of the Year in 1987. His research on Sporadic E was cited as a contributing factor. At the time, he had been engaged in this research for three years, and was planning to continue for another 8 years.

In 1962, Mike was invited by Professor J. A. Gledhill at Rhodes University, Grahamstown, to join Dr Georg Gruber in the exploration of the radio emission from Jupiter. A year later, Georg and Mike were invited by Professor C. H. Barrow of Florida State University, USA, to become part of their worldwide research team that researched those radio emissions. Mike and Georg received honourable mention in the British journal, *Nature*.

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## PE radio ham wins award as Radio Amateur of the Year

By JENNY CULLIAM  
A PORT ELIZABETH radio ham is assisting in an international VHF research project of scientific importance.

He is Mr Michael Bosch (ZS2FM), who has just been named Radio Amateur of the Year for 1987 by the South African Amateur Radio Development Trust.

His experiments and research on "Sporadic E" (patches of ionised clouds which appear intermittently and reflect VHF signals over long distances) have been recognised by the International Amateur Radio Union affiliated to the International Telecommunication Union.

He has been asked to help further on the international project, which is of interest to scientists because they cannot explain what causes the phenomenon.

His research work on "Sporadic E" has taken three years and will last another eight years.

At his home in Walmer, Mr Bosch has an array of receivers and transmitters, many of which he designed and built himself.

"I prefer to build them myself. I get such a kick when they work even better than the commercial ones."

Radio has been his hobby for 25 years and he is also an amateur astronomer.

He is the only radio ham in Port Elizabeth to hold a special blank coverage licence to listen to signals through the entire VHF spectrum.

He has also recently received permission from the municipality to erect a taller-than-usual radio mast - with the approval of his neighbours.

His award as 1987 Radio Amateur of the Year is a cash prize and certificate and was made in recognition of his experimentation and research on VHF.

Mr Bosch works from his home as a cinema equipment and electronics contractor.

"People sometimes say that radio hams just make interference and noise, but they play a very useful part in civil defence and in times of floods or disasters," said Mr Bosch.

Radio or TV interference was caused by poorly designed receivers and in England a law was recently passed putting the onus on the manufacturer of the receiver to see that it did not cause interference.

In 1983 Mr Bosch was asked by Rhodes University to work with Dr Georg Gruber in the investigation of radio emissions from the planet Jupiter.

Mr MICHAEL BOSCH, of Port Elizabeth, who has been chosen 1987 Radio Amateur of the Year.